

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-794 REV. C
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-794 REV. 2

REF. TCCA STC: SH05-4
REF. FAA STC: SR02794NY
REF. EASA STC: 10031514

1.0 PURPOSE

This service instruction is intended to make the D350-794-011/-111 and D130-794-021/-121 Auxiliary Fuel Tanks compatible with Eurocopter Squirrel Cheek using DSI 9599-011 kit.

2.0 INSTALLATION POCEDURE

2.1 PREPARATION

Perform the following steps:

- 2.1.1 Remove and retain the gas spring, compartment door, and hardware.
- 2.1.2 Remove and retain the forward support bracket and attaching hardware of the Eurocopter Squirrel Cheek.
- 2.1.3 If installed, remove and retain MS20822-8D 90° Fitting from top of D4055-041 or D4464-041 Fuel Tank.
- 2.1.4 If the aircraft is equipped with later model ECL Aux Airframe Fuel Filter Drain Hose, it is recommended to procure from Eurocopter and install P/N ESK-1324 elbow fitting to eliminate interference of drain hose with Auxiliary Fuel Tank.

2.2 INSTALLATION OF GUTTERS AND LOWER TIE DOWN POINT:

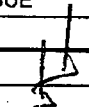
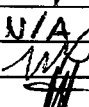
- 2.2.1 Follow steps 3.1 through 3.4 of IIN-D350-794.
Step 3.2 is only applicable to EC130 aircraft.
- 2.2.2 Replace Steps 3.5 (AS350) or 3.6 (EC130) of IIN-D350-794 with the following instructions:
 - 2.2.2.1 Reference Figure 1 of this service instruction and drawing Sheet 2 and 3 of D350-794-001 (AS350) or D130-794-002 (EC130). Place fuel tank in position. Push firmly forward and inboard. Mark position of side restraint angle P/N D4004-043 and rear restraint angle/gutter P/N D4005-1. Rear restraint angle needs to be trimmed off to fit as desired.
 - 2.2.2.2 Side restraint angle P/N D4004-043 is to be located $17.5" \pm 0.4"$ (445 mm \pm 10 mm) aft of the forward bulkhead. Locate holes as shown in Figure 1 of this service instruction.
 - 2.2.2.3 Remove tank. Install AKS7-1032-130 inserts.
 - 2.2.2.4 Attach rear restraint angle/gutter P/N D4005-1 with eight (8) countersunk rivets, use 0.032" packer as necessary.
 - 2.2.2.5 Attach side restraint angle with four (4) AN525 screws and attach bottom strap tie down bracket P/N D4004-5 with five (5) MS24694 screws per Figure 1 of this service instruction.
- 2.2.3 Perform Step 3.7.
- 2.2.4 Perform Step 3.8 (AS350 only). Refer to Figure 3 and 4 of this service instruction.
Note for Step 3.8.1: It is acceptable to substitute up to two (2) MS20470AD4 rivet with existing bolt from aft support bracket of the Eurocopter Squirrel Cheek.
Note for Step 3.8.2: Replace Step 3.8.2 with Section 2.3 of this service instruction.
- 2.2.5 Perform Step 3.9 (EC130 only). Refer to Figure 3 and 4 of this service instruction.
Note for Step 3.9.1: It is acceptable to substitute up to two (2) MS20470AD4 rivet with existing bolt from aft support bracket of the Eurocopter Squirrel Cheek.
Note for Step 3.9.2: Replace Step 3.9.2 with Section 2.3 of this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-Q-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 12.03.01
CERT. NO.: SH05-4
ISSUE NO.: 3

A	NEW ISSUE	MB	12.02.23
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.		DRAWING NO. DSI 9599	REV. A
DATE 12.02.23		SHEET 1 OF 5	
TITLE DART AUX TANK AND ECL SQUIRREL CHEEK COMPATIBILITY NTS		SCALE	
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2.3 INSTALLATION OF D4420-041/D4420-043 TOP SUPPORT/LEG ASSEMBLIES

To substitute installation of D4006-041 Top Support Assy referred to in IIN-D350-794.
Refer to Figure 3 and 4 of this service instruction.

- 2.3.1 With tank in position and secured in with strap P/N D4024-041 (ref. IIN-D350-794), locate D4420-041 and D4422-1/-3 Shims. Locate D4420-043 and a D4422-1 Shim so the centerline of the leg on D4420-043 and D4422-1 Shim coincides with existing AN3 size hole in existing rib assembly and Squirrel Cheek top aft support bracket.

NOTE: Enlarge existing hole in Squirrel Cheek top aft support bracket to Ø0.250" to locate/fasten the D4420-043 Top Support Leg Assy and substitute the existing fastener in that one location with provided AN4 fastener. Trim D4420-043 Top Support Leg Assy, and D4422-1/-3 Shims as required to eliminate possible interference with existing ribs, stringers, rivet heads, or D4420-041.

- 2.3.2 Transfer mark location of D4420-043 onto D4420-041.
2.3.3 Remove and using existing hole in D4420-043, transfer drill Ø0.128" hole to D4420-043 and fasten using MS20470AD4 Rivets.
2.3.4 Install Top Support/Leg Support Assembly, Spacer, and Shims with provided hardware.
Torque to 50-70 in-lbs.
2.3.5 Re-install the forward top support of the Squirrel Cheek per ECL STC using part and hardware removed at Step 2.1.2.
2.3.5 Complete installation by following Steps 3.10 through 3.16. Ensure to re-install MS20822-8D 90° Fitting at top of D4055-041 or D4464-041 Fuel Tank prior to installing the vent line.
2.3.6 Re-install Squirrel Cheek door and gas spring in accordance with ECL STC.

2.4 INSTALLATION OF D4423-1 SPLASH GUARD EXTENSION

Refer to Figure 2 of this service instruction.

- 2.4.1 Remove the D4008-7 Washers by unfastening the nuts from the screws. Retain all.
2.4.2 Fasten the D4008-7 Washers as shown using the hardware removed at the previous step.
2.4.3 Locate the Splash Guard Extension and fasten in place as shown.

3.0 WEIGHT AND BALANCE

There is a negligible weight change associated with the installation of DSI-9599-011 Kit and this modification. However, the weight and balance information of both the Eurocopter Squirrel Cheek and DART Auxiliary Tank is cumulative and applicable.

4.0 MAINTENANCE AND CONTINUED AIRWORTHINESS

Refer to ICA-D350-794 for maintenance of the auxiliary tank. Note: It is recommended to remove the compartment door and gas spring, auxiliary tank vent line, including MS20822-8D 90° Fitting at top of D4055-041 or D4464-041 Fuel Tank, and D4004-043 Side Restraint Angle prior to removing the auxiliary tank for inspection.

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CHECKED		DRAWING NO.	REV. A
MFG. APPR.		DSI 9599	SHEET 2 OF 5
APPROVED		TITLE	DART AUX TANK AND
DE APPR.		ECL SQUIRREL CHEEK COMPATIBILITY NTS	
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5.0 PARTS LIST

Qty -011	Part Number	Description
X	DSI 9599-011	SQUIRREL CHEEK COMPATIBILITY KIT
1	D4004-043	SIDE RESTRAINT ANGLE
1	D4420-041	TOP SUPPORT ASSY
1	D4420-043	TOP SUPPORT LEG
1	D4422-1	SHIM
2	D4422-3	SHIM
1	D4423-1	SPLASH GUARD EXTENSION
10	AKS7-1032-130	INSERT
2	AN4-6A	BOLT
4	AN525-10R9	SCREWS
10	CR3212-4-05	RIVET
10	CR3212-4-06	RIVET
10	CR3212-5-06	RIVET
10	CR3212-5-07	RIVET
4	MS20470AD4-7	RIVET
4	MS20470AD4-5	RIVET
2	MS21042-08	NUT (OR MS21042L08)
5	MS24694-S51	SCREW
2	MS35206S242	SCREW (OR MS27039-08-05)
4	NAS1149DN832J	WASHER
2	NAS1149F0463P	WASHER

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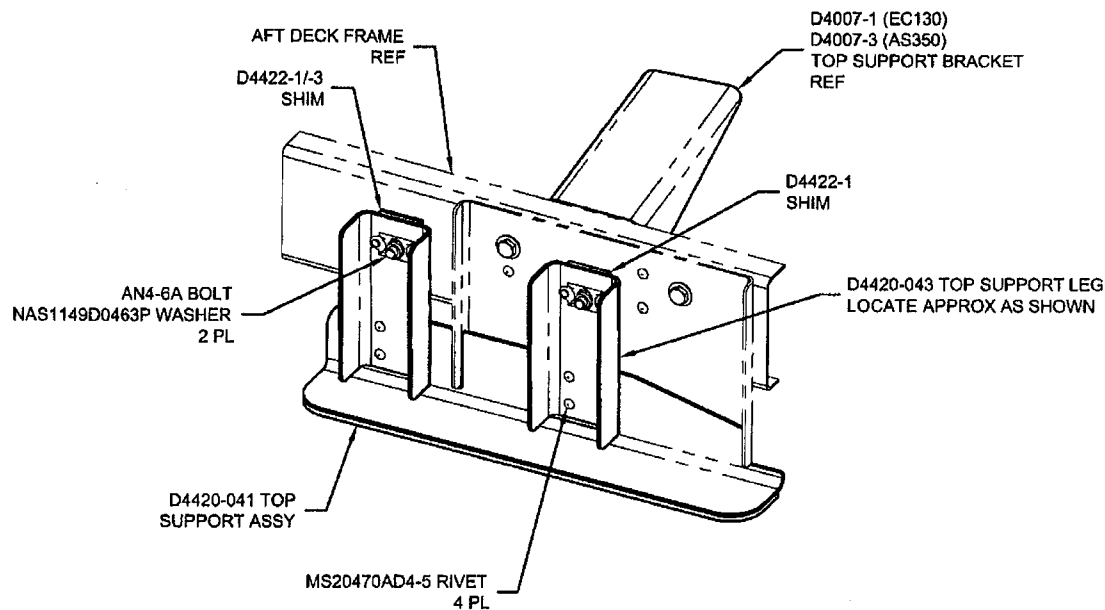
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FWD
OUTBRD

FIGURE 3: INSTALLATION OF TOP SUPPORT ASSY
(SHOWN WITH SQUIRREL CHEEK, TANK, AIRCRAFT SKIN AND DECK REMOVED FOR CLARITY)

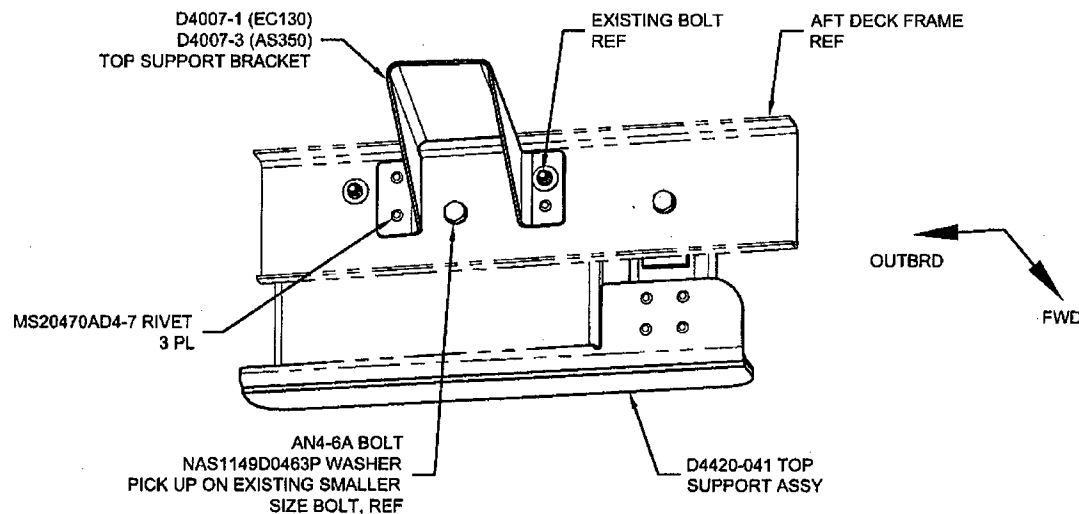


FIGURE 4: INSTALLATION OF TOP SUPPORT ASSY
(SHOWN WITH SQUIRREL CHEEK, TANK, AIRCRAFT SKIN AND DECK REMOVED FOR CLARITY)

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